

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-11 (Canceled).

Claim 12 (New): A stride monitoring device, comprising:

first and second shoes, the first shoe including at least a magnetic mass, the second shoe including at least measurement means to make at least one physical measurement; and electronic means for processing of the physical measurement;

wherein the measurement means includes at least one accelerometer and at least one magnetometer capable of outputting signals that can be processed to determine stride parameters.

Claim 13 (New): A device according to claim 12, wherein each of the first and second shoes includes at least one magnetic mass, measurement means for making at least one physical measurement, and electronic means for processing the physical measurement, the measurement means including at least one accelerometer and at least one magnetometer capable of outputting signals that can be processed to determine the stride parameters.

Claim 14 (New): A device according to claim 12, wherein the magnetic mass includes at least one permanent magnet.

Claim 15 (New): A device according to claim 12, wherein the measurement means includes a plurality of accelerometers.

Claim 16 (New): A device according to claim 12, wherein the measurement means includes a plurality of magnetometers.

Claim 17 (New): A device according to claim 12, wherein the electronic means is provided with means for transmitting a signal output by the electronic means.

Claim 18 (New): A device according to claim 17, further comprising portable means for receiving the signal transmitted by the transmission means and for displaying data representative of the signal.

Claim 19 (New): A device according to claim 18, wherein the portable means comprises:

- data reception means;
- electronic data processing means for processing data, the electronic data processing means including a memory;
- control input means; and
- display means.

Claim 20 (New): A device according to claim 19, wherein the memory includes:

- a sequence to calibrate the signal transmitted by the transmission means, as a function of stride length and intrinsic parameters of the shoes,
- a stride length estimating algorithm,
- an algorithm to calibrate the signal transmitted by the transmission means as a function of the parameters input by a user, and
- an algorithm to estimate the stride speed.

Claim 21 (New): A device according to claim 20, wherein the calibration sequence is designed to determine a mathematical calibration law by a polynomial regression, and to determine a direct correspondence between the measured signal and the stride length, for given shoes and a given individual.

Claim 22 (New): A device according to claim 20, wherein the stride length estimating algorithm uses a measurement of a variation in magnetic field resulting from movement of the magnetic mass.